












Date: Monday, 02/03/2009 11:24:06 AM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b>	: CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b>	: WEARPLATE
<b>Job Number</b>	: 46178		
<b>Estimate Number</b>	: 10606		
<b>P.O. Number</b>	:	<b>Part Number</b>	: D33193
<b>This Issue</b>	: 02/03/2009 <b>S.O. No.</b> :	<b>Drawing Number</b>	: D3319 REV. B
<b>Prsht Rev.</b>	: NC	<b>Project Number</b>	: N/A
<b>First Issue</b>	: / / <b>Type</b> : SMALL /MED FAB	<b>Drawing Revision</b>	: B
<b>Previous Run</b>	: 44083	<b>Material</b>	:
<b>Written By</b>	:	<b>Due Date</b>	: 16/03/2009 <b>Qty:</b> 4 <b>Um:</b> Each
<b>Checked &amp; Approved By</b>	JUD 09.03.02		
<b>Comment</b>	: Est: A 05.05.12 New issue KJJ/JLM Est Rev:B Now on Waterjet 06-10-03 JLM		
<b>Additional Product</b>			
Job Number: 			
<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>	
1.0	M1010S18GA	1010/1025 SHEET .048	
			
<b>Comment:</b> Qty.: 3.4150 sf(s)/Unit Total: 13.6601 sf(s) 1010/1025/A21/6aA SHEET .048" Thick Batch: 110996 ml 09 03 10 (4)			
2.0	WATER JET	FLOW WATER JET	
			
<b>Comment:</b> FLOW WATER JET 1-Cut as per Dwg D3319 Dwg Rev: B Prog Rev: B 2-Deburr if necessary ml 09 03 10 (4)			
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE	
			
<b>Comment:</b> INSPECT PARTS AS THEY COME OFF MACHINE ml 09 03 10 (2)			
4.0	QC8	SECOND CHECK	
			
<b>Comment:</b> SECOND CHECK 0903-10 (4)			
5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1	
			
<b>Comment:</b> SMALL & MEDIUM FAB RESOURCE 1 Deburr if necessary N/A			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Monday, 02/03/2009 11:24:06 AM  
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Drawing Name: WEARPLATE

Job Number: 46178

Part Number: D33193

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Form using DT8326 & DT8261 as per Dwg D3319 Rev: B

SB 02/03/11 (4)

7.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

02/03/11

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld hard surface using D3319-3T2 per QSI 004 and Dwg D3319 Rev: B

Qty Part Number Description Batch

A/R N/A

7560 Hardcoat Rod

11/09560

EC 9-3-19 (4)

9.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

02/03/19 (4)

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

02/03/19 (4)

11.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

11/09648

START TIME:

8:45

OVEN TEMPERATURE:

320°

FINISH TIME:

9:15

BR 09-03-20

(4)

12.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

09-03-20

(X)

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify on inside surface using a permanent fine point marker with the following:

TCCA-PDA, Dart Aerospace Ltd.

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Monday, 02/03/2009 11:24:06 AM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 46178

Part Number: D33193

Job Number:



Seq. #:

Machine Or Operation:

Description :

P/N: D3319-3, B/N: BXXXXX

For Product Eligibility see PDA05-18

and Stock

Location:

St 497

SS 09/05/2009

14.0

QC21

FINAL INSPECTION/W/O RELEASE



09/03/24

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 09-03-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 46178
<b>Description:</b> Wearplate		<b>Part Number:</b> D3319-3
<b>Inspection Dwg:</b> D3319	<b>Rev:</b> B	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

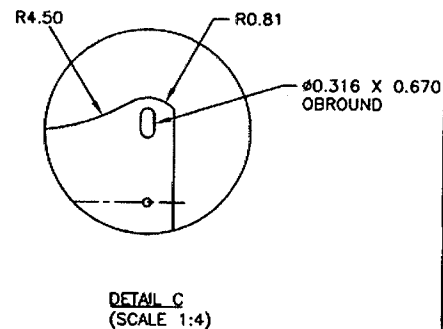
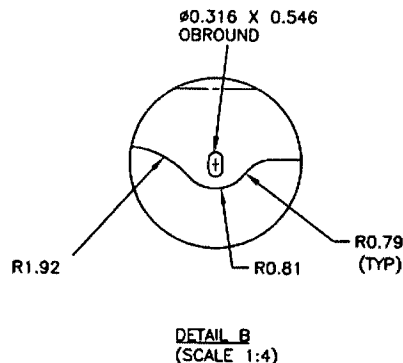
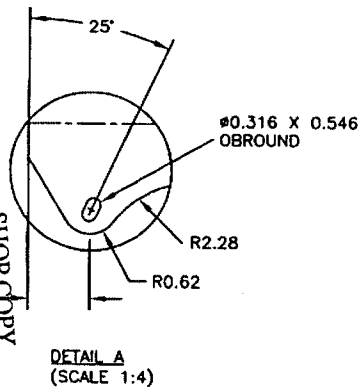
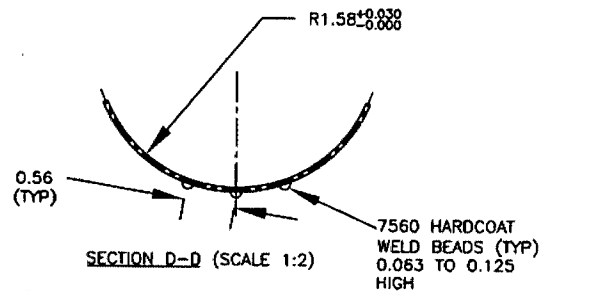
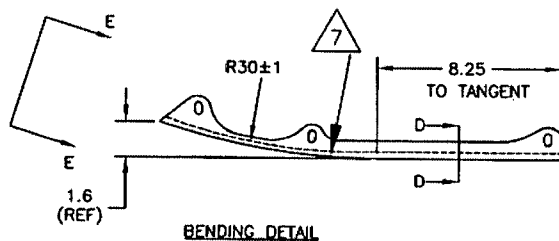
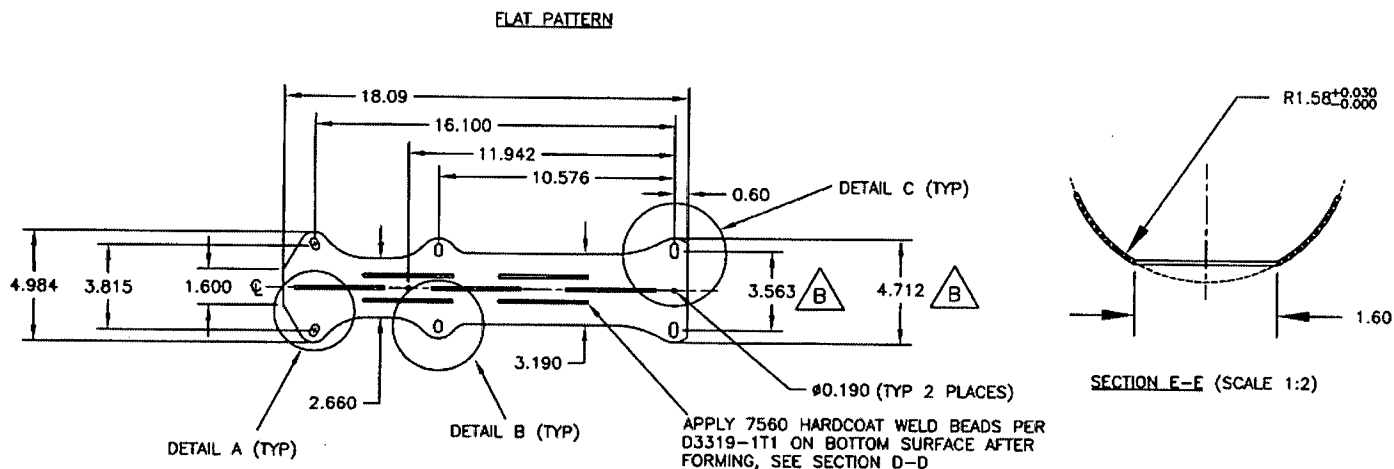
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
75.52	+/-0.030	75.52	✓		M-T	
74.420	+/-0.010	74.420	✓		M-T	
62.770	+/-0.010	62.770	✓		M-T	
52.890	+/-0.010	52.89	✓		M-T	
30.790	+/-0.010	30.79	✓		M-T	
8.690	+/-0.010	8.688	✓		VEN	
0.60	+/-0.030	0.596	✓		VEN	
2.690	+/-0.010	2.697	✓		VEN	
2.940	+/-0.010	2.949	✓		VEN	
3.527	+/-0.010	3.520	✓		VEN	
4.518	+/-0.010	4.513	✓		VEN	
Ø0.190	+0.005/-0.001	0.191	✓		VEN	
2.940	+/-0.010	2.940	✓		VEN	
2.940	+/-0.010	2.947	✓		VEN	
2.690	+/-0.010	2.694	✓		VEN	
5.063	+/-0.010	5.060	✓		VEN	
6.163	+/-0.010	6.160	✓		VEN	
Ø0.316 x 0.607	+0.006/-0.001 x +/-0.010	0.316x0.607	✓		VEN	
0.048	+/-0.010	0.048	✓		VEN	

<b>Measured by:</b> M.M	<b>Audited by:</b> [Signature]	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 09.03.10	<b>Date:</b> 09.03.10	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	07.07.18	New Issue	KJ/JLM [Signature]	[Signature]

**DART**



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05-09-20

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**D3319-1 WEARPLATE**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N 8XXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

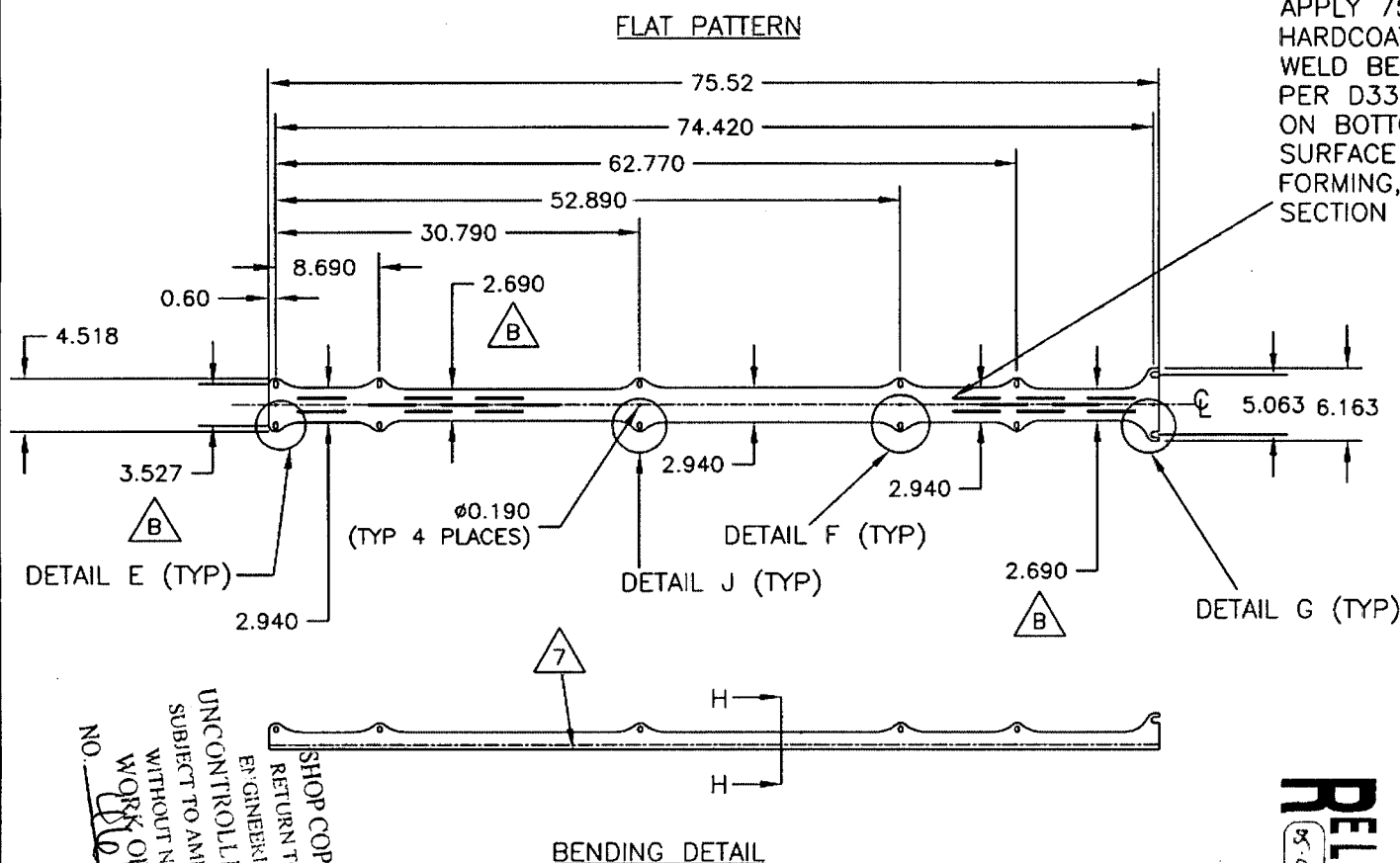
DESIGN	DRAWN BY	DART AEROSPACE LTD
P1	P1	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
		D3319
DATE	TITLE	REV. B
05.06.06	WEARPLATE	SHEET 1 OF 5
		SCALE
		1:8
A	04.09.24	NEW ISSUE
B	05.06.06	WIDEN HOLES, REDUCE WIDTH -3/-5/-7



**DART**

DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. B
05.06.06	D3319	SHEET 2 OF 5
	TITLE	SCALE
	WEARPLATE	1:15

APPLY 7560  
HARDCOAT  
WELD BEADS  
PER D3319-3T1  
ON BOTTOM  
SURFACE AFTER  
FORMING, SEE  
SECTION H-H



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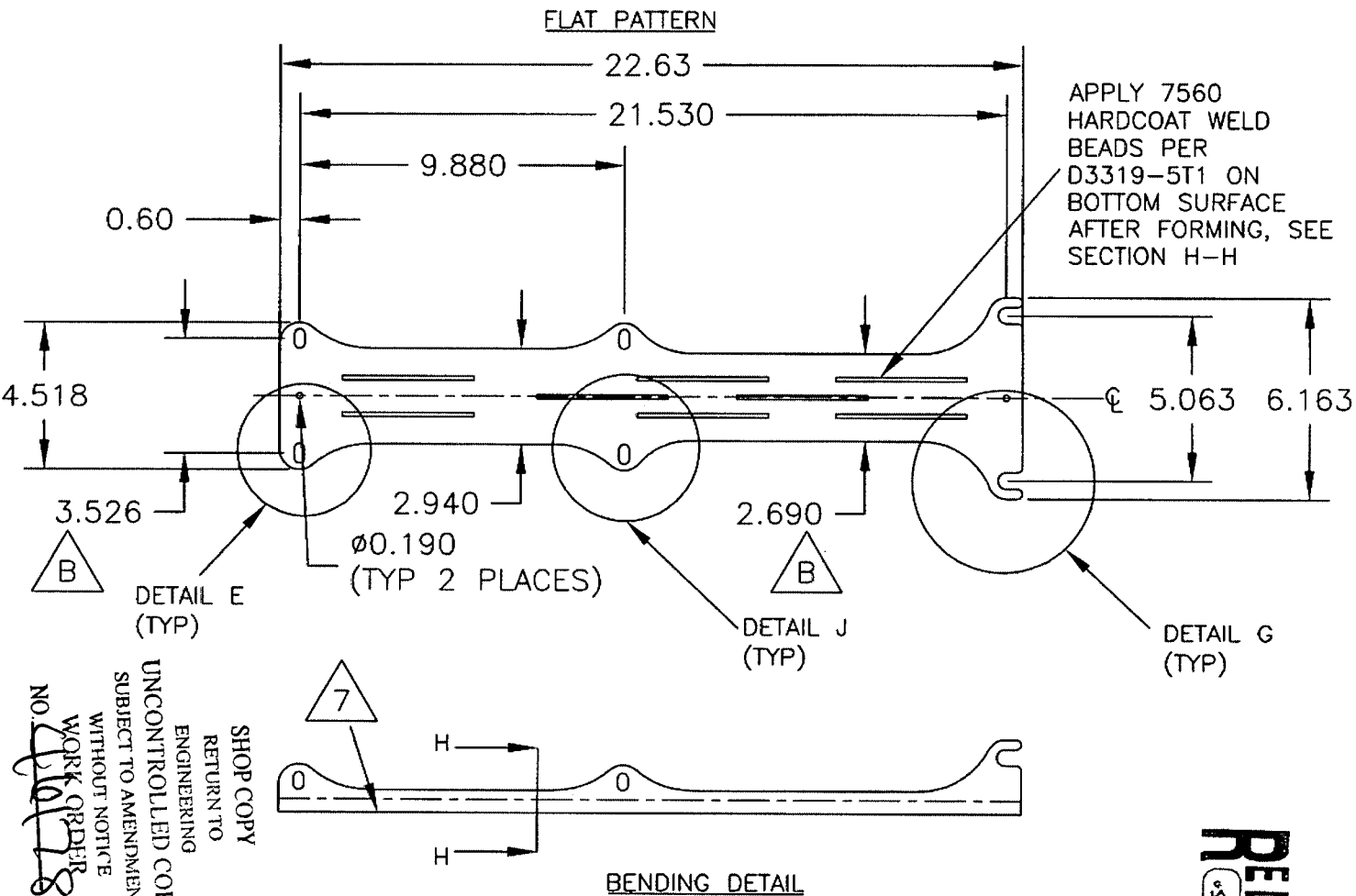
# D3319-3 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-3 B/N BXXXXX,  
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

**RELEASED**  
05.01.30

**DART**

DESIGN	D41	DRAWN BY	D41	DART AEROSPACE LTD
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA
DATE	05.06.06	TITLE	D3319	REV. B
		WEARPLATE		SHEET 3 OF 5
				SCALE 1:5

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05.07.30

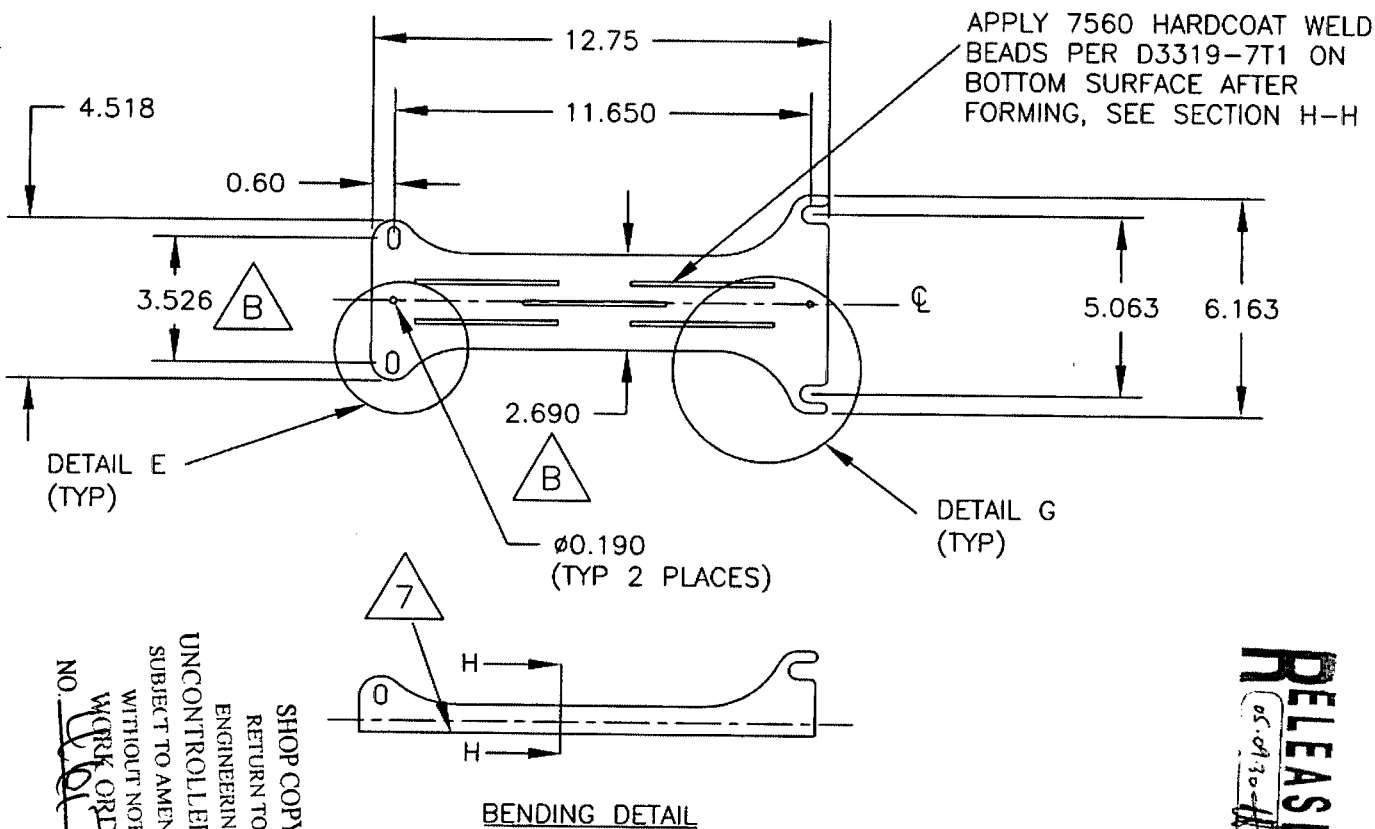
D3319-5 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-5 B/N BXXXXX,  
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**DART**

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CHECKED	GH	APPROVED	GH	HAWKESBURY, ONTARIO, CANADA
DATE	05.06.06	TITLE	D3319	REV. 8
		WEARPLATE		SHEET 4 OF 5
				SCALE 1:5

**FLAT PATTERN****D3319-7 WEARPLATE**

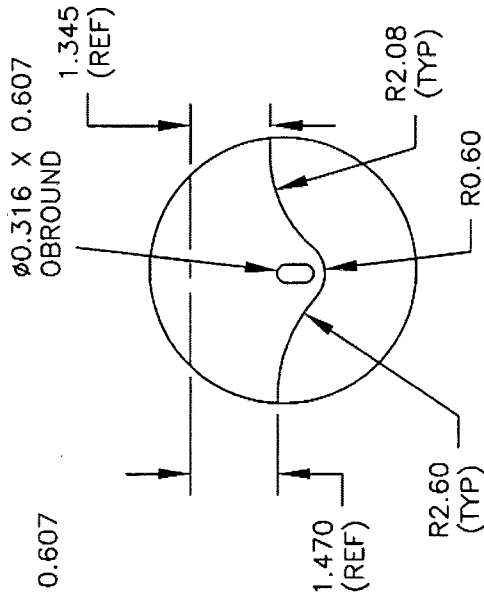
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:  
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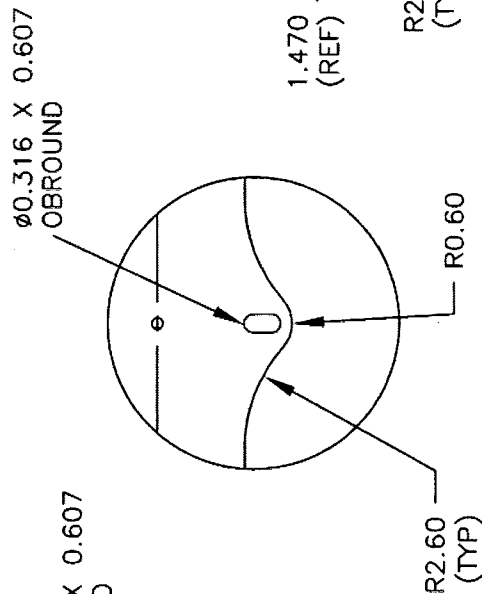


DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3319	REV. B SHEET 5 OF 5
DATE 05.06.06		TITLE WEARPLATE	SCALE 1:3

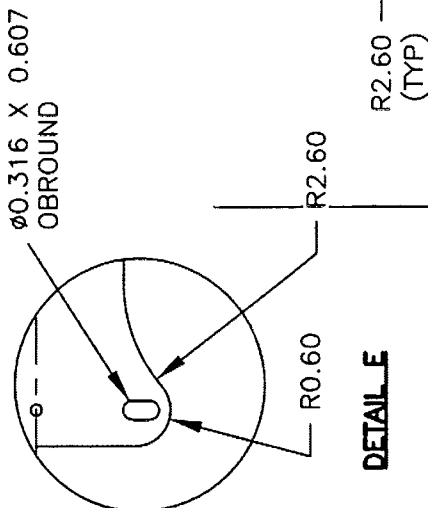
RELEASED  
05-09-30



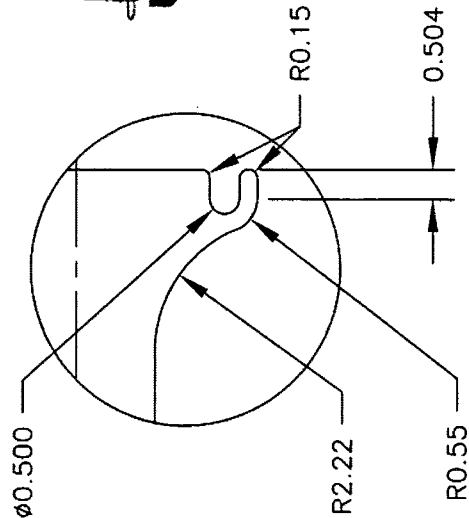
DETAIL J



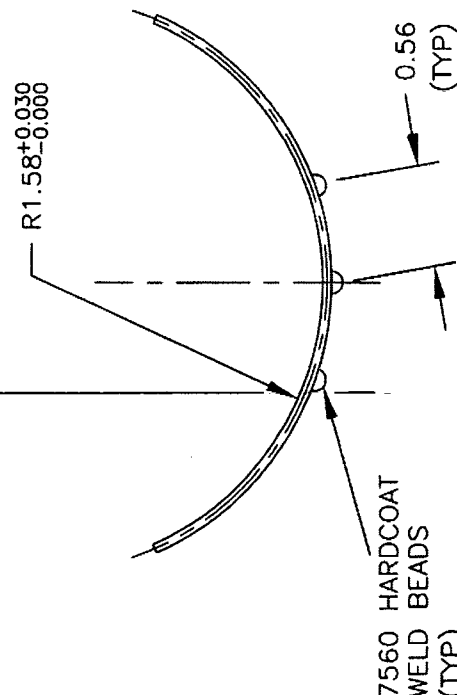
DETAIL E



DETAIL F



DETAIL G



SECTION H-H  
(SCALE 1:1)

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